

**SOUTH DAKOTA TECHNICAL INSTITUTE
FACILITY PROJECT APPLICATION**

(Use when applying for funds that are bonded through the South Dakota Health
& Education Authority)

(Submit one (1) copy each to South Dakota Department of Education &
South Dakota Health & Education Authority)

Institute Mitchell Technical Institute **Date** February 20, 2008

Project Title/Programs Utility & Convergence Technologies Centers and
Land Laboratory Projects

Local Board Approving Resolution February 25, 2008
(Date)

Anticipated Length of Project Two (2) March 2008 – March 2010
(Number of Years) (Dates)

Project Square Footage:

Project	Utilities	Convergence
Sq. Ft.	14,000	20,000

Project Need

1) Rationale/Intended Use & Industry Need:

The utility industry is one of an aging population and has the distinction as having one of the oldest, if not the oldest, average age of any industry in the nation. At the heart of this proposal is a need to address an extreme labor shortage for future utility personnel plus provide a venue of ongoing training and education for individuals currently employed in the utility industry.

The current campus for Utility Technologies programs is in a 16,000 square feet building with only five acres available for a land laboratory. This building serves both the Powerline and the Propane & Natural Gas programs. A new facility will allow for adding a minimum of two sections of students to these programs and to provide more space for outdoor and indoor training.

The Convergence Technology Center will allow MTI to locate those programs associated with telecommunications, computer based process and quality control systems, to be located in one location. Programs included in this mix are Satellite Communications Technology, Communications Systems Engineering Technology, and Computer Systems Technology with a focus on

Forensics and Electronic Security Systems, Computer Software Systems, and Supervisory Control and Data Acquisition, (SCADA) a program that allows for the remote control of technology in all industries including utilities, railroads, and Agriculture processing plants.

Moving the latter three programs from the main campus will provide additional space for existing programs in the construction industries: Architectural Drafting and Building Construction, Heating and Cooling Technology, and MTI's largest program, Electrical Construction & Maintenance. Currently, the laboratories for these programs are small and cramped. Larger laboratories will allow for more projects and improve safety conditions for the programs.

2) Program(s): **Utilities:** Powerline & Propane/Natural Gas;

Covergence Technologies:

- Satellite Communications
- Supervisory Control & Data Acquisition (SCADA)
- Communications Systems Engineering Technologies
- Computer Systems Technology
- Computer Software Technology

3) Program(s)Wage/Salary:

	2005 Graduate Wages (surveyed 6 mo after graduation)	2006 Graduate Wages (preliminary data)
<u>Utilities:</u>		
Powerline:	\$16.07	---
Propane/Natural Gas:	\$16.14	---
<u>Convergence:</u>		
Satellite Communication:	\$15.40	---
SCADA:	\$19.36	---
Telecom:	\$14.20	---
Computer Systems:	\$13.90	---
Computer Software:	\$10.44	---

4) Program(s) Current and Projected Enrollment-(Current to year 5):

Project	Utilities	Convergence
Current	60	60
Year 1	80	80
Year 2	100	100
Year 3	100	100
Year 4	100	100
Year 5	100	100

5) Safety Issues

Buildings will be equipped with electronic surveillance and detection devices with minimal entrances as well as personnel stationed at the main entrance of the facilities.

6) Additional Project Information

Projected Estimated Cost	\$ <u>6,968,315</u>
Dollars Requested from Bonding Authority	\$ <u>6,000,000</u>
Other Resources for Funding Project	\$ <u>968,315</u>

Location & Legal description of project (Survey & title commitment)

Lot G-1, G-2, G-3, G-4 and G-5 in the Southwest Quarter of Section 20, Township 103 North, Range 60 West of the 5th P.M., Davison County, South Dakota.

Preliminary construction draw-down schedule

Month 1 = 0%	\$0
Month 4 = 34.78%	\$2,086,800
Month 8 = 66.07%	\$1,877,400
Month 12 = 92.75%	\$1,600,800
Month 16 = 100%	<u>\$ 435,000</u>
Total	\$6,000,000

Estimated weighted average useful life of Project (See attached)

**TECHNICAL INSTITUTES
SERIES 2008
MITCHELL TECHNICAL INSTITUTE**

**Schedule of Project Costs and Average
Reasonably Expected Economic Life**

<u>DESCRIPTION</u>	<u>(A) Total Costs</u>	<u>(B) Paid by Bond Proceeds</u>	<u>(C) Economic Life in Years</u>	<u>(D) Product of (B) * (C)</u>
Building (new)	3,600,000	3,600,000	40	144,000,000
Building (combination)			30	0
Building (remodeling)			20	0
H.V.A.C., fire protection	1,086,000	1,086,000	20	21,720,000
Plumbing	120,000	120,000	20	2,400,000
Electrical	420,000	420,000	20	8,400,000
Equipment - 8 years			8	0
Equipment - 10 years			10	0
Equipment - 15 years			15	
Professional Services	648,000	648,000	20	12,960,000
Builder's Risk	6,000	6,000	20	120,000
Contingency	120,000	120,000	20	2,400,000
Totals	<u>6,000,000</u>	<u>6,000,000</u>		<u>192,000,000</u>

Average Reasonable Expected Economic Life: Not Less than 32.00 years. (D/B)

32.00

- (1) Computation of economic life as of expected placed in service date does not include period of years (or portion thereof) from the date such assets are expected to be placed in service.
- (2) Facilities given an original economic life of 20 years or longer include only property that constitutes a building or an integral part thereof, which integral part (i) is not removable without damage to such part or the building of which it is a part and (ii) is not to be used with respect to, or designed to permit or facilitate the operation of, any particular piece of equipment or non-real property.